Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended). A method for determining the horizontal and vertical offset for the M x N DCT block boundaries of a decompressed image produced by a DCT-based compression system, comprising the steps of:

a) computing one or more selected DCT coefficients from nonoverlapping, contiguous M x N blocks of the decompressed image, beginning at a selected offset;

b) determining a coefficient dispersion for each selected DCT coefficient from ~~processing~~ a set of values for ~~each selected~~ the respective DCT coefficient obtained from the blocks of the decompressed image ~~in order to identify a coefficient dispersion~~; ~~and~~

c) repeating steps (a) and (b) for a plurality of offsets within an M x N block ~~in order to identify~~ ; and

d) identifying the offset that minimizes the coefficient dispersion, thereby determining the block boundaries of the decompressed image.

2 (original). The method according to claim 1 wherein step b) further comprises:

b1) computing a coefficient histogram from the set of values for each selected DCT coefficient obtained from the blocks of the decompressed image; and

b2) computing a dispersion metric from each coefficient histogram.

3 (currently amended). The method according to claim 2 wherein ~~step c)~~ step d) further comprises:

~~c1) comparing~~ d1) comparing the dispersion metrics corresponding to the plurality of offsets to determine the minimum dispersion coefficient histogram; and

~~c2) selecting~~ d2) selecting the offset that corresponds to the minimum dispersion coefficient histogram as the offset for the DCT block boundaries.

4 (original). The method according to claim 1, wherein $M = 8$ and $N = 8$.

5 (original). The method according to claim 1, wherein the decompressed image is a JPEG-decompressed image.

6 (original). The method according to claim 1, wherein the decompressed image is an MPEG-decompressed image.

7 (currently amended). ~~The method according to claim 2,~~ A method for determining the horizontal and vertical offset for the M x N DCT block boundaries of a decompressed image produced by a DCT-based compression system, comprising the steps of:

a) computing one or more selected DCT coefficients from nonoverlapping, contiguous M x N blocks of the decompressed image, beginning at a selected offset;

b) computing a coefficient histogram from the set of values for each selected DCT coefficient obtained from the blocks of the decompressed image;

c) computing a dispersion metric from each coefficient histogram; and

d) repeating steps (a), (b), and (c) for a plurality of offsets within an M x N block in order to identify the offset that minimizes the coefficient dispersion, thereby determining the block boundaries of the decompressed image;

wherein the dispersion metric is a ratio of the maximum to minimum histograms sums, wherein the sums are computed by summing the histogram counts at periodic intervals.

8 (original). The method according to claim 1 wherein the one or more selected DCT coefficients is the DC coefficient.

9 (original). The method according to claim 1 wherein the plurality of offsets corresponds to all possible offsets within the M x N block.

10 (original). The method according to claim 1 wherein the decompressed image is a color image and steps a) through c) are completed for a luminance component of the color image.

11 (currently amended). The method according to claim 3 wherein a plurality of selected DCT coefficients are computed in step a) and a corresponding plurality of coefficient histograms, dispersion metrics and minimum dispersion coefficient histograms are computed in steps b1), b2) and ~~c1), and wherein in step c2)~~ d1), and wherein in step d2) the offset is determined from the plurality of minimum dispersion coefficient histograms.

12 (original). The method according to claim 2 wherein step a) further comprises the steps of scaling the DCT coefficients and rounding each DCT coefficient to the nearest integer prior to computing the coefficient histogram in step b1).

13 (original). A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 1.

14 (currently amended). A system for determining the horizontal and vertical offset for the *M* x *N* DCT block boundaries of a decompressed image produced by a DCT-based compression system, said system comprising:

a) means for computing one or more selected DCT coefficients from nonoverlapping, contiguous *M* x *N* blocks of the decompressed image, beginning at a selected offset;

b) means for determining a coefficient dispersion for each selected DCT coefficient from ~~processing~~ a set of values for ~~each selected~~ the respective DCT coefficient obtained from the blocks of the decompressed image ~~in order to identify a coefficient dispersion~~; ~~and~~

c) means for repeating the computing and ~~processing~~ determining in paragraphs (a) and (b) for a plurality of offsets within an M x N block ~~in order to identify~~ ; and

means for identifying the offset that minimizes the coefficient dispersion, thereby determining the block boundaries of the decompressed image.

15 (currently amended). The system according to claim 14 wherein said means for ~~processing~~ determining a set of values further comprises:

means for computing a coefficient histogram from the set of values for each selected DCT coefficient obtained from the blocks of the decompressed image; and

means for computing a dispersion metric from each coefficient histogram.

16 (currently amended). The system according to claim 15 wherein said means for ~~repeating~~ identifying further comprises:

means for comparing the dispersion metrics corresponding to the plurality of offsets to determine the minimum dispersion coefficient histogram; and

means for selecting the offset that corresponds to the minimum dispersion coefficient histogram as the offset for the DCT block boundaries.

17 (original). The system according to claim 14, wherein $M = 8$ and $N = 8$.

18 (original). The system according to claim 14, wherein the decompressed image is a JPEG-decompressed image.

19 (original). The system according to claim 14, wherein the decompressed image is an MPEG-decompressed image.

20 (currently amended). ~~The system according to claim 16,~~ A system for determining the horizontal and vertical offset for the M x N DCT block

boundaries of a decompressed image produced by a DCT-based compression system, said system comprising:

a) means for computing one or more selected DCT coefficients from nonoverlapping, contiguous M x N blocks of the decompressed image, beginning at a selected offset;

b) means for processing a set of values for each selected DCT coefficient obtained from the blocks of the decompressed image in order to identify a coefficient dispersion; and

c) means for repeating the computing and processing in paragraphs (a) and (b) for a plurality of offsets within an M x N block in order to identify the offset that minimizes the coefficient dispersion, thereby determining the block boundaries of the decompressed image;

wherein said means for processing a set of values further comprises:

means for computing a coefficient histogram from the set of values for each selected DCT coefficient obtained from the blocks of the decompressed image; and

means for computing a dispersion metric from each coefficient histogram;

wherein said means for repeating further comprises:

means for comparing the dispersion metrics corresponding to the plurality of offsets to determine the minimum dispersion coefficient histogram; and

means for selecting the offset that corresponds to the minimum dispersion coefficient histogram as the offset for the DCT block boundaries; and

wherein the dispersion metric is a ratio of the maximum to minimum histograms sums, wherein the sums are computed by summing the histogram counts at periodic intervals.

21 (original). The system according to claim 14 wherein the one or more selected DCT coefficients is the DC coefficient.

22 (original). The system according to claim 14 wherein the plurality of offsets corresponds to all possible offsets within the M x N block.

23 (original). The system according to claim 14 wherein the decompressed image is a color image and the computations are completed for a luminance component of the color image.

24 (new). A method for determining the horizontal and vertical offset for the *M* x *N* DCT block boundaries of a decompressed image, comprising the steps of:

computing one or more selected DCT coefficients from nonoverlapping, contiguous *M* x *N* blocks of the decompressed image, at each of a plurality of offsets;

determining coefficient dispersion metrics for the selected DCT coefficients at each of the offsets, from sets of values for the respective DCT coefficients obtained from the blocks of the decompressed image;

identifying from said coefficient dispersion metrics, a minimal dispersion that is present at all of said offsets and an additional dispersion that is lacking at one of said offsets and present at all of the others of said offsets; and

selecting the one of said offsets lacking said additional dispersion.

25 (new). The method according to claim 24 wherein said determining further comprises computing a coefficient histogram from the set of values for each said selected DCT coefficient at each of said offsets.

26 (new). The method according to claim 24, wherein $M = 8$ and $N = 8$.

27 (new). The method according to claim 24, wherein the decompressed image is a JPEG-decompressed image.

28 (new). The method according to claim 24, wherein the decompressed image is an MPEG-decompressed image.

29 (new). The method according to claim 24, wherein the dispersion metric is a ratio of the maximum to minimum histograms sums, wherein the sums are computed by summing the histogram counts at periodic intervals.

30 (new). The method according to claim 24, wherein the one or more selected DCT coefficients is the DC coefficient.

31 (new). The method according to claim 24, wherein the plurality of offsets corresponds to all possible offsets within the M x N block.

32 (new). The method according to claim 24, wherein the decompressed image is a color image and said computing, determining, and identifying are completed for a luminance component of the color image.